

MONDARY OPERATING CO., INC.

PETROLEUM - EXPLORATION & DEVELOPMENT

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FEB 16 1984

DIVISION OF OIL & GAS
BAKERSFIELD

1999 E. Edison Hwy., Suite 26, Bakersfield, California 93305

Phone: (805) 323-4441

FLUID SAMPLING OF OLCESE ZONE IN
MACPHERSON OIL COMPANY
TRIBE A-6, SECTION 28
T.27S., R.28E., M.D.B.&M.
MT. POSO OIL FIELD
KERN COUNTY, CALIFORNIA

FEBRUARY 5, 1984

BY: F. P. MONDARY PETROLEUM GEOLOGIST
CALIFORNIA REGISTRATION #2684

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LIST OF EXHIBITS

MAP EXHIBIT

LOCATION OF TRIBE A-6 IN MT. POSO
OIL FIELD

EXHIBIT A

SWAB & BAILER FLUID RUNS

EXHIBIT B

ZALCO LABORATORY ANALYSIS OF RECOVERED
WATERS FROM MACPHERSON OIL COMPANY
TRIBE A-6

EXHIBIT C

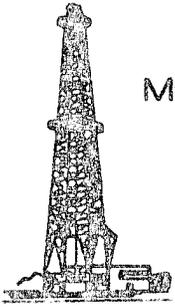
UNITED STATES HEALTH DEPARTMENT STANDARDS

EXHIBIT D

MACPHERSON OIL COMPANY A-6 WELL DATA

EXHIBIT E

SHELL OIL COMPANY VEDDER 12-15 MT. POSO OIL
FIELD SECTION 9, T.27S., R.28E., M.D.B.&M.



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Mr. Don Macpherson, Jr.
Macpherson Oil Company
P. O. Box 5368
Oildale, California 93388

Dear Mr. Macpherson;

At your request, I supervised the recent fluid sampling of entry fluids into the Macpherson Oil Company Tribe A-6 well for the purpose of collecting well fluids from the Olcese zone. Map Exhibit #A indicated the geographic location of subject well in the Mt. Poso Oil Field. The well is located on the Macpherson Oil Company Tribe A lease consisting of 160 acres in the E $\frac{1}{2}$ of the E $\frac{1}{2}$ of Section 28, T.27S., R.28E., M.D.B.&M.

Since 1974 Macpherson Oil Company has been injecting produced oil field vedder zone water into the Olcese zone at Mt. Poso Oil Field with approval from the California Division of Oil & Gas and California State Water Resources Control Board by interagency agreements. Each injection plan submitted by Macpherson Oil Company included a detailed engineering study and geologic study as outlined in Pages 2 &

3 of the Application for Primacy in the Regulation of Class II Injection Wells Under Section 1425 of the Safe Drinking Water Act April 1981.

On March 14, 1983 the California Division of Oil & Gas received primacy over Class II injection wells under the Federal U.I.C. program and imposed restrictions on nonexempt aquifers which had previously been approved for injection. Under the new regulations, all injection into Olcese zone at Mt. Poso field must be terminated prior to September 14, 1984, deadline date. Because of the above cited reasons, collection of data to investigate Olcese conditions was initialed by Macpherson Oil Company.

The Macpherson Oil Company Tribe A-6 fluid sampling period was from April 1983 until June 1983. During that time 96 swab and fluid bailer runs were made. Each run was witnessed and tabulated. Samples were collected in glass containers for determination of oil and greases and into polyurethane containers for Boron determinations. In every run oily, watery fluid was sampled from the Olcese zone. Laboratory analysis of the sampled fluids is attached as Exhibit #B. Analysis indicates retained hydrocarbons at unacceptable levels pursuant to Public Health Standards. The United States Public Health Standards require hydrocarbons to be less than 1 ppm.

Boron was determined to be above acceptable levels for surface usage. Boron sampled was 2.194 ppm placing these Olcese waters into Class III water as established by the United States Public Health Service Drinking Water standards. Exhibit #C Table A-3 indicates the minimum standards.

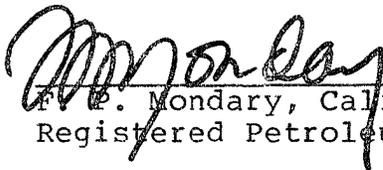
In addition, well file records at the Bakersfield California Division of Oil & Gas further indicate the Olcese zone is petroliferous at Mt. Poso. Exhibit #E records of the Shell Oil Company vedder #12-15 well drilled by Shell Oil Company in the Mt. Poso Field was a primary Olcese zone oil objective. The well was drilled and sidewall cored in May 1970 and found to contain considerable hydrocarbons in the Olcese. The attached Sidewall Core Record indicated every Olcese core contained hydrocarbons. Shell Oil Company Reserves Department at Bakersfield, California indicated a #3 in the % oil column was 85%+ oil staining.

Other wells drilled through the Olcese sands encountered oil showings in the mud system. One such example was the Montara Petroleum Company Tribe "B" 65-28 located in Mt. Poso. This well encountered good oil shows at 300' to 350'. Showings were witnessed by Mr. John Sowers. Excellent shows at 530' to 580' were recorded by Mr. Don Dahlquist owner of Dahlquist Drilling Company. Mr. Dahlquist has drilled over 600 oil wells and is well qualified to determine oil shows on and in the mud

system.

The above cited wells and conditions are evidence the Olcese sands do contain hydrocarbons and Borons above limits established by the Public Health Services and California State levels where sampled and evaluated.

Very truly yours,



F. P. Mondary, California
Registered Petroleum Geologist #2684

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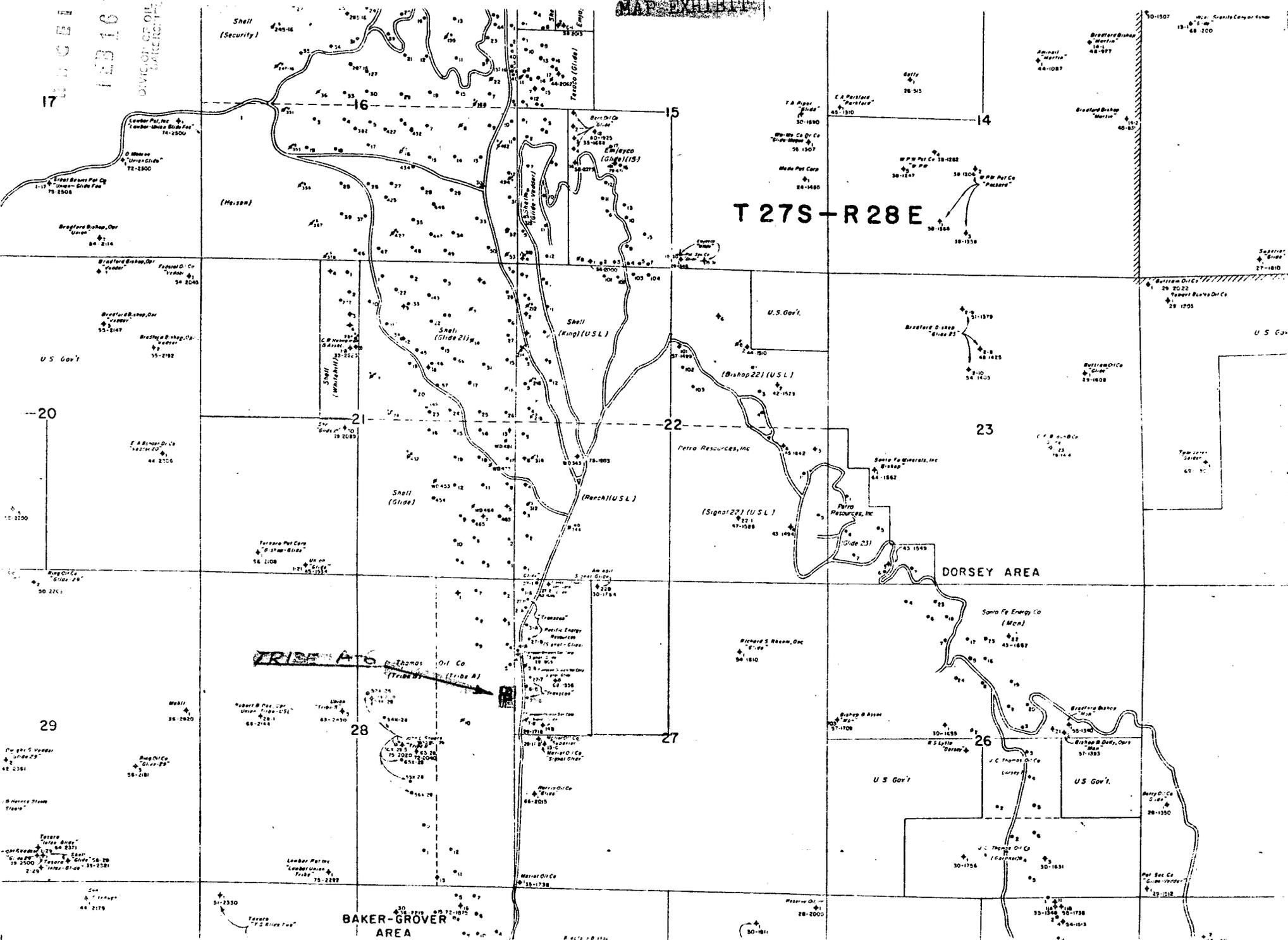
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DIVISION OF OIL & GAS
LAND SURVEYS

MAP EXHIBIT

T 27S - R 28E



TRIBE A-G

DORSEY AREA

BAKER-GROVER AREA

44-2179

51-2350

28-2000

50-1507
Superior
Glades
27-1810

Bradford Bishop
Morris
48-277

F. A. Rogers
"Parker"
43-1910

W.P.W. Oil Co
"Parker"
30-1890

W.P.W. Oil Co
"Parker"
30-1897

48-2361

58-2181

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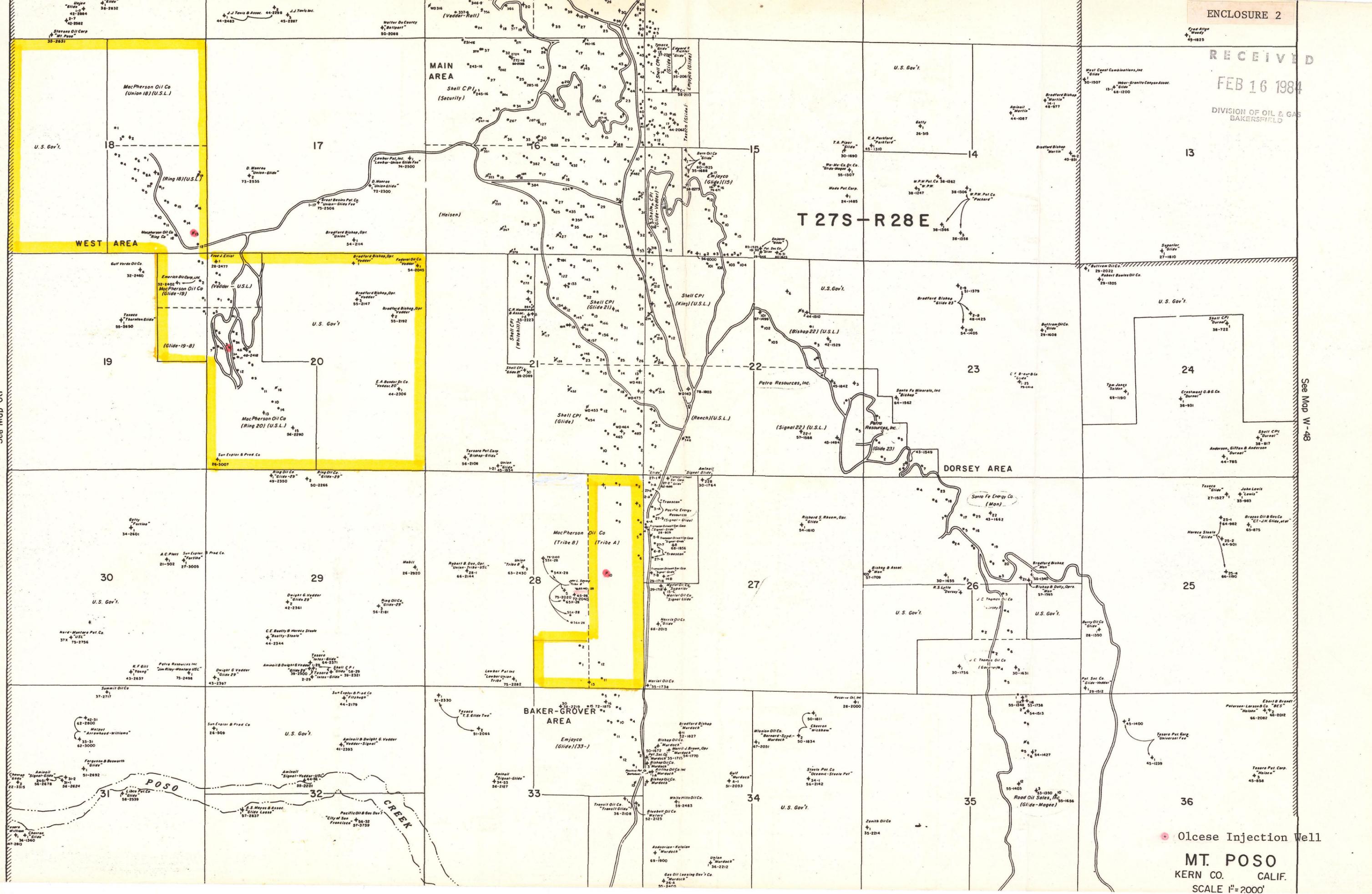
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See Map 66

See Map W-48



Olcese Injection Well
MT. POSO
KERN CO. CALIF.
SCALE 1"=2000'

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DEPT. OF HEALTH

TRIBE A 6

6/28/83

Swab cup runs

RUNS	Fluid Level	Fluid pulled from	Sample
68	450	500	yes
69	450	500	
70	450	500	
71	450	500	
72	450	500	
73	450	500	yes
74	450	500	
75	450	500	
76	450	500	
77	450	500	
78	450	500	yes
79	450	500	
80	450	500	
81	450	500	
82	450	500	
83	450	500	yes
84	450	500	
85	450	500	
86	450	500	
87	450	500	
88	450	500	yes
89	450	500	
90	450	500	
91	450	500	
92	450	500	
93	450	500	yes

TRIBE A-6

4/28/83

FLUID BAILER RUNS

<u>RUNS</u>	<u>FLUID LEVEL</u>	
#1	445'	Sample taken
#2	450'	
#3	455'	
#4	460'	
#5	465'	Sample
#6	470'	
#7	475'	
#8	485'	
#9	495'	
#10	505'	Sample

Wait 30 mins.

#11 505'

5/12/83

Swab cup runs = 1½ min. per run

<u>Runs</u>	<u>Fluid Level</u>	<u>Fluid pulled from</u>	
#12	460'	494'	Sample
#13	470'	494'	Sample
#14	470'	494'	
#15	470'	494'	
#16	470'	494'	Sample
#17	470'	494'	
#18	470'	494'	
#19	470'	500'	
#20	470'	500'	
#21	470'	500'	
#22	470'	500'	Sample
#23	470'	500'	
#24	470'	500'	
#25	470'	500'	
#26	470'	500'	
#27	470'	500'	
#28	470'	500'	
#29	470'	500'	
#30	470'	500'	
#31	470'	500'	
#32	470'	500'	Sample
#33	470'	500'	
#34	470'	500'	
#35	470'	500'	
#36	470'	500'	
#37	470'	500'	
#38	470'	500'	

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REGULATION

Wait 3½ Hrs. & resume swab runs

	<u>Runs</u>	<u>Fluid Level</u>	<u>Fluid pulled from</u>	
	#39	450'	500'	Sample
	#40	460'	500'	
	#41	460'	500'	
	#42	470'	500'	
	#43	470'	500'	
	#44	470'	500'	
	#45	470'	500'	
	#46	470'	500'	
	#47	470'	500'	Sample
6/13/83	#48	450'	500'	Sample
	#49	450'	500'	
	#50	450'	500'	
	#51	450'	500'	
	#52	460'	500'	Sample
	#53	460'	500'	
	#54	460'	500'	
	#55	460'	500'	
	#56	470'	500'	
	#57	470'	500'	Sample
	#58	470'	500'	
	#59	470'	500'	
	#60	470'	500'	
	#61	470'	500'	Sample
	Wait 40 min. & resume swabing			
	#62	460'	500'	Sample
	#63	460'	500'	
	#64	460'	500'	
	#65	460'	500'	
	#66	460'	500'	
	#67	460'	500'	Sample

SCHLUMBERGER

INDUCTION-ELECTRICAL LOG

EXHIBIT E

COMPANY SHELL OIL COMPANY

WELL VEDDER 12-15 RECEIVED

FIELD MT. POSO

COUNTY KERN STATE CALIFORNIA

LOCATION 1605'W & 573'N FROM THE S.E. CORNER OF: ST SNP FDC-GR

Sec. 9 Twp. 27S Rge. 28E

Permanent Datum: GL Elev. 1125

Log Measured From DF 4 Ft. Above Perm. Datum Elev.: K.B. D.F. 1129

Drilling Measured From DF G.L. 1125

Date	5-7-70	RECEIVED
Run No.	ONE	FEB 16 1984
Depth—Driller	375	
Depth—Logger	377	
Btm. Log Interval	376	
Top Log Interval	80	
Casing—Driller	@	
Casing—Logger	@	
Bit Size	9-7/8	
Type Fluid in Hole	FGM	
Dens.	70	40
pH		
Fluid Loss		
Source of Sample	CIRC.	
R _n @ Meas. Temp.	6.28 @ 80 °F	@
R _m @ Meas. Temp.	5.19 @ 62 °F	@
R _{ms} @ Meas. Temp.	@	@
Source: R _m R _{ms}	M	@
R _m @ BHT	5.5 @ 92 °F	@
Time Since Circ.	1 HR.	
Max. Rec. Temp.	92 °F	

Res in Mud Type or Additional Samples

Sample No.	Driller	Fluid in Hole	Visc.	Fluid Loss	Source of Sample	Meas. Temp.	Meas. Temp.	Meas. Temp.	Run No.	Tool Type	Tool Position	Equipment Data
						@	@	@	ONE	6FF40	STAND-OFF	Other

Scale Changes: Scale Up Hole, Scale Down Hole

6FF40 zero set in hole at depth of _____

porehole signal of R_m = _____

